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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/783,873

Applicant(s)

KUBLER ET AL.

Examiner

VENKATESH HALIYUR

Art Unit

2476

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-60 (1-21, 33, 46-48, 58-59 are canceled) is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-32, 34-45, 49-57 and 60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-848)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendment filed on 02/26/2010 has been fully considered. However a new ground(s) of rejections has been made in this office action for non-compliance to 35 USC 101 and by using new sections of the prior art. Therefore the allowability and the finality of the rejection of claims indicated in the previous office action have been withdrawn. Rejection follows.
2. Claims 22-60 is pending in the application. Claims 1-21, 33, 46-48, 58-59 are cancelled.

Terminal Disclaimer

3. The terminal disclaimer filed on 02/26/2010 has not been approved. Please contact the office for further clarifications and to correct the TD.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 50-57, 60 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter because, in claim 50, lines 1-2 the limitation of "A computer-readable storage having stored thereon a computer program.." covers both statutory and non-statutory subject matter because the data stored on the storage medium can be transitory in nature. Therefore in order to comply with the rules of Interim Examination Instructions for Evaluating Subject Matter Eligibility Under 35 USC 101, claims 50-57,60, must be modified to recite as "A non-transitory computer-readable storage..."

Since claims depending on claim 50 are also rejected because they contain the same deficiency. Therefore appropriate corrections are required to Claims 50-57, 60.

Please refer to Interim Examination Instructions for Evaluating Subject Matter Eligibility Under 35 USC 101 for more details.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 22-32,34-45,49-57 and 60 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-25 of U.S. Patent No. 6,850,510 and claims 1-21 of U.S. Patent No. 5,726,984. of the instant application and secondary references thus anticipating the claim(s) of the instant application. Claim(s) of the instant application therefore is/are not patently distinct from the earlier patent claim(s) and as such is/are unpatentable over obvious-type double patenting. A later patent/application claim is not patentably distinct from an earlier claim if the later claim is anticipated by the earlier claim. "A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or **anticipated by**, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus). " ELI LILLY AND COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001). "Claim 12 and Claim 13 are generic to the species of invention covered by claim 3 of the patent. Thus, the generic invention is "anticipated" by the species of the patented invention. Cf., Titanium Metals Corp. v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (holding that an earlier species disclosure in the prior art defeats any generic claim) 4. This court's predecessor has held that, without a terminal disclaimer, the species claims preclude issuance of the generic application. In re Van Ornum, 686 F.2d 937, 944, 214 USPQ 761, 767 (CCPA 1982). Accordingly, absent a terminal disclaimer, claims 12 and 13 were properly rejected under the doctrine of obviousness-type double patenting." (In re Goodman (CA FC) 29 USPQ2d 2010 (12/3/1993).

6. Claims 22-24, 29-32, 34-37, 42-45, 46, 49-50, 54-57, and 60 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-25 of U.S. Patent No. 6,850,510 in view of claims 1-21 of U.S. Patent No. 5,726,984 and Henley et al. (U.S Patent No: 5,526,353) and Chan et al [US Pat: 5,550,861] and Sharman et al (U.S Patent No. 5,774,854).

Regarding claim 22, A voice communication circuit comprising: at least one processor operable to packetize digitized voice information to produce at least one voice packet (**Mobile terminal circuit and access point circuit operable of**

transmitting and receiving both voice and data messages, claims 16, 21 of US Pat: 6,850510); a buffer operable to store the at least one voice packet (**buffer that stores digital voice information, claim 1, lines 1-5, of US Pat: 5, 726, 984**); interface circuitry operable to communicatively couple the buffer with one of a plurality of interchangeable network interfaces, each of the plurality of interchangeable network interfaces supporting communication of voice packets via an associated type of communication network (**supporting at least two communication protocols for hardwired network and wireless network to exchange analog voice and digital data packets between mobile device and stationary network device, claim 11 of US Pat: 6,850510 and claim 1, lines 29-42, of US Pat: 5, 726, 984**); the at least one processor operable to determine the associated type of communication network supported by the one of the plurality of interchangeable network interfaces in communication with the interface circuitry (**claim 6 of US Pat: 6,850510 and claim 1, lines 22-28, of US Pat: 5, 726, 984**); and the at least one processor operable to cause transmission of voice packets via the one of the plurality of interchangeable network interfaces based upon the associated type of communication network (**claim 6 of US Pat: 6,850510 and claim 15 of US Pat: 5, 726, 984**).

Chan and Sharman et al fail to disclose but Henley et al disclosed the at least one processor operable to reduce the quantity of voice packets communicated by changing the packetization based upon a level of voice activity (**compression/decompression methods, col 7, lines 19-26**);

Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine the claims 1-25 of U.S. Patent No. 6,850,510 in view of claims 1-21 of U.S. Patent No. 5,726,984 as taught by Henley and as modified by Chan and Sharman in the system of for exchange of data in interchangeable networks with wireless network, stationary data network and public switched network as claimed in the instant application. One is motivated as such in order to provide a modular interface circuitry to transmit packets over plurality interchangeable interfaces to a network.

Regarding claim 36, A voice communication circuit comprising:
interface circuitry operable to communicatively couple with one of a plurality of interchangeable network interfaces, each of the plurality of interchangeable network interfaces operable to communicate via an associated type of communication network to receive at least one voice packet (**claim 6 of US Pat: 6,850510 and claim 1, lines 22-28, of US Pat: 5, 726, 984**); a buffer operable to store the at least one voice packet; at least one processor operable to depacketize the at least one voice packet to produce digitized voice information (**buffer stores information converted from analog to digital voice information, claim 1, lines 29-35 and claim 7 of US Pat: 5, 726, 984**); the at least one processor operable to determine the associated type of communication network supported by the one of the plurality of interchangeable network interfaces in communication with the interface circuitry network (**supporting at least two communication protocols for hardwired network and wireless network to exchange analog voice and digital data packets between mobile device and stationary network device, claim 11 of US Pat: 6,850510 and claim 1, lines 29-42,**

of US Pat: 5, 726, 984); and the at least one processor operable to cause the reception of the at least one packet via the one of the plurality of interchangeable network interfaces based upon the associated type of communication network (**claim 6 of US Pat: 6,850510 and claim 15 of US Pat: 5, 726, 984**). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine the claims 1-25 of U.S. Patent No. 6,850,510 in view of claims 1-21 of U.S. Patent No. 5,726,984 for exchange of data in interchangeable networks with wireless network, stationary data network and public switched network as claimed in the instant application.

Henley et al teach the voice communication circuit of claim 36 further comprising: converter circuitry operable to convert the digitized voice information to produce a voice stream (column 7, lines 27-31). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine the teachings of Henley et al to perform the function of transmitting voice packets over plurality of interchangeable interfaces by the host processor based on the type of communication network in the system of U.S. Patent No. 6,850,510 and U.S. Patent No. 5,726,984 for exchange of data in interchangeable networks with wireless network, stationary data network and public switched network

U.S. Patent No. 6,850,510 and claims 1-21 of U.S. Patent No. 5,726,984 disclosed exchange of data in interchangeable networks with wireless network, stationary data network and public switched network, However, Henley et al teach the voice communication circuit of claim 46. However, Henley et al and Chan et al fail to

explicitly teach the at least one processor operable to adjust the buffering of voice packets in order to minimize gaps in the voice stream. Sharman teaches a text to speech system operating in real using an acoustic processor and a linguistic processor. Due to the computational time the linguistic processor requires to process data, future requests from the acoustic processor cannot be made. Thus gaps in the speech output often occur when the acoustic processor requests data from the linguistic processor. Sharman proposes a solution to overcome the gaps in data by adjusting the buffer for minimal of output data so that future requests can be supplied in a timely manner (column 7, lines 39-48). Hence the propagation delay caused by the linguistic processor is a factor affecting the adjustment in the buffer for desired optimal output. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teachings of Henley et al and Chan et al to enable the processor to adjust the buffering of voice packets based on the propagation delay in order to minimize gaps in the voice stream as taught by Sharman. Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine the teachings of Henley et al, Chan, Sharman to perform the function of transmitting voice packets over plurality of interchangeable interfaces by the host processor based on the type of communication network in the system of U.S. Patent No. 6,850,510 and U.S. Patent No. 5,726,984 for exchange of data in interchangeable networks with wireless network, stationary data network and public switched network. One is motivated as such in order to reduce the cost of the communication system while retaining the ability to retrofit certain aspects of the existing designs. One is motivated

as such to accurately halt the system based on the output in the event that an interruption occurs and a modular interface circuitry to transmit packets over plurality interchangeable interfaces to a network.

Regarding claim 50, A computer-readable storage having stored thereon a computer program having a plurality of code sections for implementing a voice communication system, the voice communication system operable to accept at any point in time one of a plurality of interchangeable network interfaces, each of the interchangeable network interfaces for use with an associated type of communication network **(supporting at least two communication protocols for hardwired network and wireless network to exchange analog voice and digital data packets between mobile device and stationary network device, claim 11 of US Pat: 6,850510 and claim 1, lines 29-42, of US Pat: 5, 726, 984)**, the code sections executable by a computer for causing the computer to perform the operations comprising: detecting the presence of an interchangeable network interface **(access point circuit configured to send and receive data from wireless network and stationary network, claim 16 of US Pat: 6,850,510)**; determining the associated type of communication network for use with the detected interchangeable network interface **(claim 6 of US Pat: 6,850510 and claim 15 of US Pat: 5, 726, 984)**; establishing a packet voice call via the associated type of communication network **(claims 21 and 23 of US Pat: 6,850510)**; converting analog voice information to transmit voice packets; sending the transmit voice packets via the associated type of communication network using the interchangeable network interface **(claim 12-14 of US Pat: 5, 726, 984)**; receiving voice packets via the

associated type of communication network using the interchangeable network interface **(claims 13,14 of US Pat: 5, 726, 984)**; and converting the received voice packets to analog voice information **(claim 12 of US Pat: 5, 726, 984)**.

Henley et al and Chan et al fail to explicitly teach converting the received voice packets to analog voice information comprises: buffering voice packets for an adjustable period of time to avoid gaps in the analog voice information. Sharman teaches a text to speech system operating in real using an acoustic processor and a linguistic processor. Due to the computational time the linguistic processor requires to process data, future requests from the acoustic processor cannot be made. Thus gaps in the speech output often occur when the acoustic processor requests data from the linguistic processor. Sharman proposes a solution to avoid the gaps in data by adjusting the buffer for minimal of output data so that future requests can be supplied in a timely manner (column 7, lines 39-48). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teachings of Henley et al and Chan et al to enable the buffering of voice packets for an adjustable period of time based on the propagation delay to avoid gaps in the analog voice information as taught by Sharman. Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine the teachings of Henley et al, Chan, Sharman to perform the function of transmitting voice packets over plurality of interchangeable interfaces by the host processor based on the type of communication network in the system of U.S. Patent No. 6,850,510 and U.S. Patent No. 5,726,984 for exchange of data in interchangeable networks with wireless network, stationary data network and

public switched network. One is motivated as such in order to reduce the cost of the communication system while retaining the ability to retrofit certain aspects of the existing designs. One is motivated as such to accurately halt the system based on the output in the event that an interruption occurs.

Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine claims 1-25 of U.S. Patent No. 6,850,510 in view of claims 1-21 of U.S. Patent No. 5,726,984 for exchange of data in interchangeable networks with wireless network, stationary data network and public switched network as claimed in the instant application. One is motivated as such in order to provide a modular interface circuitry to transmit packets over plurality interchangeable interfaces to a network.

Regarding claims 23 and 37, U.S. Patent No. 6,850,510 and claims 1-21 of U.S. Patent No. 5,726,984 disclosed exchange of data in interchangeable networks with wireless network, stationary data network and public switched network, However, Henley et al teach the voice communication circuit of claim 22 wherein the voice packets are packetized according to an Internet protocol (IP) (column 4, lines 6-7). Henley et al teach the microprocessor-driven packet assembly and disassembly circuits are equipped in separate computers. Additionally, it is further disclosed that the present invention provides a system for communicating audio data in the packet-based computer network - column 8, lines 65-66. Therefore the associate type of communication network must be supported by the interfaces);- the at least one processor (FIG. 2, 210) operable to cause the transmission of voice packets via the one

of the plurality of interchangeable network interfaces based upon the associated type of communication network (column 7, 19-26). Henley et al disclosed that the packet assembly circuit performs conversion of audio data into digital packet data for transmission over the network but fails to disclose that transmission of voice packets is performed via the plurality of interchangeable network interfaces. However, Chan et al disclosed a method of providing plurality of modularly configurable or interchangeable interfaces for the peripheral components of a host device using PCMCIA interface circuitry to transmit packets to an associated network (item 30 of Fig 2, col 2, lines 40-67, col 3, lines 1-43). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention was made to use the method of providing plurality of modularly configurable or interchangeable interfaces for a host device to transmit voice packets to a network as taught by Chan et al in the system of Henley et al to perform the function of transmitting voice packets over plurality of interchangeable interfaces by the host processor based on the type of communication network. Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine the teachings of Henley et al and Chan to perform the function of transmitting voice packets over plurality of interchangeable interfaces by the host processor based on the type of communication network in the system of U.S. Patent No. 6,850,510 and U.S. Patent No. 5,726,984 for exchange of data in interchangeable networks with wireless network, stationary data network and public switched network. One is motivated as such in order to provide a modular interface circuitry to transmit packets over plurality interchangeable interfaces to a network.

Regarding claim 24, Henley et al disclose the voice communication circuit of claim 23 wherein the Internet protocol (IP) comprises the transmission control protocol (TCP)/Internet protocol (IP) (column 4, lines 6-7). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine the teachings of Henley et al to perform the function of transmitting voice packets over plurality of interchangeable interfaces by the host processor based on the type of communication network in the system of U.S. Patent No. 6,850,510 and U.S. Patent No. 5,726,984 for exchange of data in interchangeable networks with wireless network, stationary data network and public switched network.

Regarding claims 29, 42, and 54, Henley et al teach the voice communication circuit of claims 22, 36, and 50, respectively, wherein the associated type of communication network comprises a wired network (FIG. 1). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine the teachings of Henley et al to perform the function of transmitting voice packets over plurality of interchangeable interfaces by the host processor based on the type of communication network in the system of U.S. Patent No. 6,850,510 and U.S. Patent No. 5,726,984 for exchange of data in interchangeable networks with wireless network, stationary data network and public switched network.

Regarding claims 30, 43, and 55, Henley et al teach the voice communication circuit of claims 29, 42, and 50, respectively, wherein the wired network comprises an Ethernet compatible network (FIG. 1,140). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine the

teachings of Henley et al to perform the function of transmitting voice packets over plurality of interchangeable interfaces by the host processor based on the type of communication network in the system of U.S. Patent No. 6,850,510 and U.S. Patent No. 5,726,984 for exchange of data in interchangeable networks with wireless network, stationary data network and public switched network.

Regarding claims 31, 44, and 56, Henley et al teach the voice communication circuit of claims 29, 42, and 50, respectively, wherein the wired network comprises a conventional telephone switching network (FIG. 1, 110, 160, column 8, lines 55-63). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine the teachings of Henley et al to perform the function of transmitting voice packets over plurality of interchangeable interfaces by the host processor based on the type of communication network in the system of U.S. Patent No. 6,850,510 and U.S. Patent No. 5,726,984 for exchange of data in interchangeable networks with wireless network, stationary data network and public switched network.

Regarding claim 34, Henley et al teach the voice communication circuit of claim 22 further comprising converter circuitry operable to convert a voice stream into digitized voice information (column 7, lines 19-21). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine the teachings of Henley et al to perform the function of transmitting voice packets over plurality of interchangeable interfaces by the host processor based on the type of communication network in the system of U.S. Patent No. 6,850,510 and U.S. Patent No.

5,726,984 for exchange of data in interchangeable networks with wireless network, stationary data network and public switched network.

Regarding claims 35 and 49, Henley et al teach the voice communication circuit of claims 22 and 46, wherein the voice stream comprises an analog signal (column 7, lines 19-21). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine the teachings of Henley et al to perform the function of transmitting voice packets over plurality of interchangeable interfaces by the host processor based on the type of communication network in the system of U.S. Patent No. 6,850,510 and U.S. Patent No. 5,726,984 for exchange of data in interchangeable networks with wireless network, stationary data network and public switched network.

Regarding claim 57, Henley et al teach the computer-readable storage of claim 50 wherein converting analog voice information to transmit voice packets comprises: reducing the volume of transmit voice packets based upon a level of voice activity (column 5, lines 65-67, column 6, lines 1-5). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine the teachings of Henley et al to perform the function of transmitting voice packets over plurality of interchangeable interfaces by the host processor based on the type of communication network in the system of U.S. Patent No. 6,850,510 and U.S. Patent No. 5,726,984 for exchange of data in interchangeable networks with wireless network, stationary data network and public switched network.

Regarding claim 60, Henley et al teach the computer readable storage of claim 50 further comprising: adapting call setup of the voice communication system based upon the type of communication network (column 11, lines 65-68, column 12, lines 1-5). Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine the teachings of Henley et al to perform the function of transmitting voice packets over plurality of interchangeable interfaces by the host processor based on the type of communication network in the system of U.S. Patent No. 6,850,510 and U.S. Patent No. 5,726,984 for exchange of data in interchangeable networks with wireless network, stationary data network and public switched network.

Regarding claims 32 and 45, U.S. Patent No. 6,850,510 and claims 1-21 of U.S. Patent No. 5,726,984 disclosed exchange of data in interchangeable networks with wireless network, stationary data network and public switched network. Henley et al teach the voice communication circuit of claims 22 and 36. However, Henley et al fail to explicitly teach the interface circuitry is compatible with a Personal Computer Memory Card Interface Association (PCMCIA) standard. Chan et al disclosed a system and method for interfacing voice communication circuit compatible with PCMCIA standard. According to the teaching, the digital entertainment terminal 12 of Fig 1 comprising personal computer memory card interface adapter (PCMCIA) port 14 of Fig 1 (column 3, lines 44-67,col 4, lines 1-14). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to use the interface circuitry compatible with a PCMCIA standard as taught by Chan et al in the system of Henley et al for the interface circuitry to be compatible with a Personal Computer

Memory Card Interface Association (PCMCIA) standard. Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine the teachings of Henley et al and Chan to perform the function of transmitting voice packets over plurality of interchangeable interfaces by the host processor based on the type of communication network in the system of U.S. Patent No. 6,850,510 and U.S. Patent No. 5,726,984 for exchange of data in interchangeable networks with wireless network, stationary data network and public switched network. One is motivated as such in order to provide a modular interface circuitry to transmit packets over plurality interchangeable interfaces to a network. One is motivated as such to allow a two way communication between the system and the flash memory module, or smart card. When such module is connected to the interface, it utilizes data processing capabilities such as buffering and facilitating modem communication.

Claims 25-26, 38-39, 51-52 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-25 of U.S. Patent No. 6,850,510 and claims 1-21 of U.S. Patent No. 5,726,984 and Henley et al. (U.S Patent No: 5,526,353) and Chan et al [US Pat: 5,550,861] and Sharman et al (U.S Patent No. 5,774,854) and Heath et al (U.S Patent No. 5,231,646).

Regarding claims 25, 38, and 51, U.S. Patent No. 6,850,510 and claims 1-21 of U.S. Patent No. 5,726,984 disclosed exchange of data in interchangeable networks with wireless network, stationary data network and public switched network. However, Henley et al teach the voice communication circuit of claims 22, 36, and 50, respectively. Henley et al and Chan et al fail to explicitly teach the associated type of

communication network is a wireless packet network. Heath et al teach a radio communication system operable of being employed in a small geographic area such as a long distance communication system. It is disclosed that an object of the invention is to provide a local area network using a predetermined protocol to connect nodes with wireless radio frequency (RF) links instead of hard wired links (column 2, lines 45-48). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teachings of Henley et al and Chan et al to make the associate type of communication network a wireless packet network as taught by Heath et al. Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine the teachings of Henley et al, Sharman ,Chan and Heath to perform the function of transmitting voice packets over plurality of interchangeable interfaces by the host processor based on the type of communication network in the system of U.S. Patent No. 6,850,510 and U.S. Patent No. 5,726,984 for exchange of data in interchangeable networks with wireless network, stationary data network and public switched network. One is motivated as such to enable computers to share resources and communicate with computers in other networks over a long distance communication system.

Regarding claim 26, 39, and 52, U.S. Patent No. 6,850,510 and claims 1-21 of U.S. Patent No. 5,726,984 disclosed exchange of data in interchangeable networks with wireless network, stationary data network and public switched network, however Henley et al teach the voice communication circuit of claims 25, 38, and 51, respectively. Henley et al and Chan et al fail to explicitly teach the wireless packet network

communicates at approximately 2.4 gigahertz. Heath et al disclose the present invention can employ a preferred band 2400 MHz or 2.4 GHz for radio communication (column 6, lines 35-41). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teachings of Henley et al to enable the wireless packet network communicating at approximately 2.4 gigahertz as taught by Heath et al. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teachings of Henley et al and Chan et al to make the associate type of communication network a wireless packet network as taught by Heath et al. Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine the teachings of Henley et al, Sharman ,Chan and Heath to perform the function of transmitting voice packets over plurality of interchangeable interfaces by the host processor based on the type of communication network in the system of U.S. Patent No. 6,850,510 and U.S. Patent No. 5,726,984 for exchange of data in interchangeable networks with wireless network, stationary data network and public switched network. One is motivated as such to achieve greater signal penetration through office walls and to reduce interference between neighboring networks, and to resolve the problem of multipath interference.

8. Claims 27-28, 40-41, 53 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-25 of U.S. Patent No. 6,850,510 and claims 1-21 of U.S. Patent No. 5,726,984 and Henley et al. (U.S Patent No:

5,526,353) and Heath et al (U.S Patent No. 5,231,646) and Sharman (U.S Patent No. 5,774,854) and Chan et al [US Pat: 5,550,861] and Avery et al (US Pat: 5,287,384).

Regarding claims 27, 40 53, U.S. Patent No. 6,850,510 and claims 1-21 of U.S. Patent No. 5,726,984 disclosed exchange of data in interchangeable networks with wireless network, stationary data network and public switched network, however, Henley et al teach the voice communication circuit but fail to teach the wireless packet network communication (column 5, lines 5-8). Heath et al disclosed that the interface wireless packet network that communicates at 2.4 GHz (column 6, lines 35-41). Chan et al disclosed a wireless data communication network circuitry (item 36 and 38 of Fig 2) for performing the pager functions via the PCMCIA card (col 2, lines 58-62, Figs 1-2). However Henley et al, Heath et al and Chan et al fail to teach the wireless packet network communicates using a frequency hopping spread spectrum technique. Avery et al teach a wireless data communication network employing frequency hopping spread spectrum transmission technique (abstract). Hence it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teachings of Henley et al, Heath et al and Chan et al to allow the wireless packet network communicate using a frequency hopping spectrum technique as taught by Avery et al. Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine the teachings of Henley et al, Chan, Sharman, Heath, Avery to perform the function of transmitting voice packets over plurality of interchangeable interfaces by the host processor based on the type of communication network in the system of U.S. Patent No. 6,850,510 and U.S. Patent No. 5,726,984 for

exchange of data in interchangeable networks with wireless network, stationary data network and public switched network. One is motivated as such to build a robust network that is resistant to interferences from other adjacent radio frequency networks..

Regarding claims 28, 41, U.S. Patent No. 6,850,510 and claims 1-21 of U.S. Patent No. 5,726,984 disclosed exchange of data in interchangeable networks with wireless network, stationary data network and public switched network, Henley et al teach the voice communication circuit, but fail to teach the wireless packet network communication (column 5, lines 5-8). Heath et al disclosed that the interface wireless packet network that communicates at 2.4 GHz (column 6, lines 35-41) and Chan et al disclosed a wireless data communication network circuitry (item 36 and 38 of Fig 2) for performing the pager functions via the PCMCIA card (col 2, lines 58-62, Figs 1-2). However Henley et al, Heath et al and Chan et al fail to teach the wireless packet network communicates using a direct sequence spread spectrum technique. Avery et al disclose the direct sequence spread spectrum (DSSS) technique was implemented by manufacturers when spread spectrum technology was first allowed by the Federal Communications Commission (column 2, lines 59-62). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to modify the teachings of Henley et al, Heath et al and Chan et al to allow the wireless packet network communicate using a direct sequence spectrum technique as taught by Avery et al. Therefore it would have been obvious for one of the ordinary skill in the art at the time the invention to combine the teachings of Henley et al, Chan, Heath, Avery to perform the function of transmitting voice packets over plurality of interchangeable

interfaces by the host processor based on the type of communication network in the system of U.S. Patent No. 6,850,510 and U.S. Patent No. 5,726,984 for exchange of data in interchangeable networks with wireless network, stationary data network and public switched network. One is motivated as such in order to reduce the cost of the communication system while retaining the ability to retrofit certain aspects of the existing designs.

Response to Arguments

10. Applicant's argument, see remarks filed on 02/26/2020 with respect to claims 22-60 have been considered but are moot in view of the new ground(s) of rejection.

Though not used in the rejections, the examiner also requests applicants to refer to Arimilli and Sharma references in the attached PTO-892 which is in the related art of digital packet voice communication system as claimed in independent claims 22, 36, 50.

Conclusion

11. Any inquiry concerning this communication or earlier communications should be directed to the attention to Venkatesh Haliyur whose phone number is 571-272-8616. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached @ (571)-272-3795. Any inquiry of a general

nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2600 or fax to 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

/Venkatesh Haliyur/

Examiner, Art Unit 2476

/Ayaz R. Sheikh/

Supervisory Patent Examiner, Art Unit 2476